Tropical Depression 31W

Tropical Depression (TD) 31W developed in the South China Sea near Palawan Island at the end of November and remained a relatively weak tropical cyclone while moving to the west. The disturbance reached a peak intensity of 30 kt before dissipating over land, northeast of Phuket, Thailand some six days after initial detection.

JTWC first noted this disturbance on the 280600Z November Significant Tropical Weather Advisory (ABPW). By 302230Z November, the suspect area had intensified and organized, thus, a Tropical Cyclone Formation Alert was issued. The first warning on TD 31W was issued about four hours later on 010300Z December.

TD 31W formed within a moderate to high vertical wind shear environment in the South China Sea. The surface circulation formed within a region bounded by the northeasterly winds of the winter monsoon and cross-equatorial southwesterlies. A subtropical ridge to the north of the disturbance would remain the dominant steering influence. TD 31W was relocated on the sixth warning, positioning the disturbance approximately 200 nm southwest of the previous position. After the relocation, TD 31W tracked westward toward the Malay Peninsula. As the cyclone moved through the Gulf of Thailand, the Thai National Oil Company (PTTEP), Chevron, and Unocal provided additional weather observations. These observations were of significant assistance in determining the location, intensity, and movement of the cyclone during passage through this area.

JTWC issued the 13th and final warning at 040300Z December as TD 31W moved over the Malay Peninsula and weakened. Subsequently, JTWC continued to monitor the tropical cyclone remnants as it moved into the Andaman Sea for redevelopment, which did not occur.

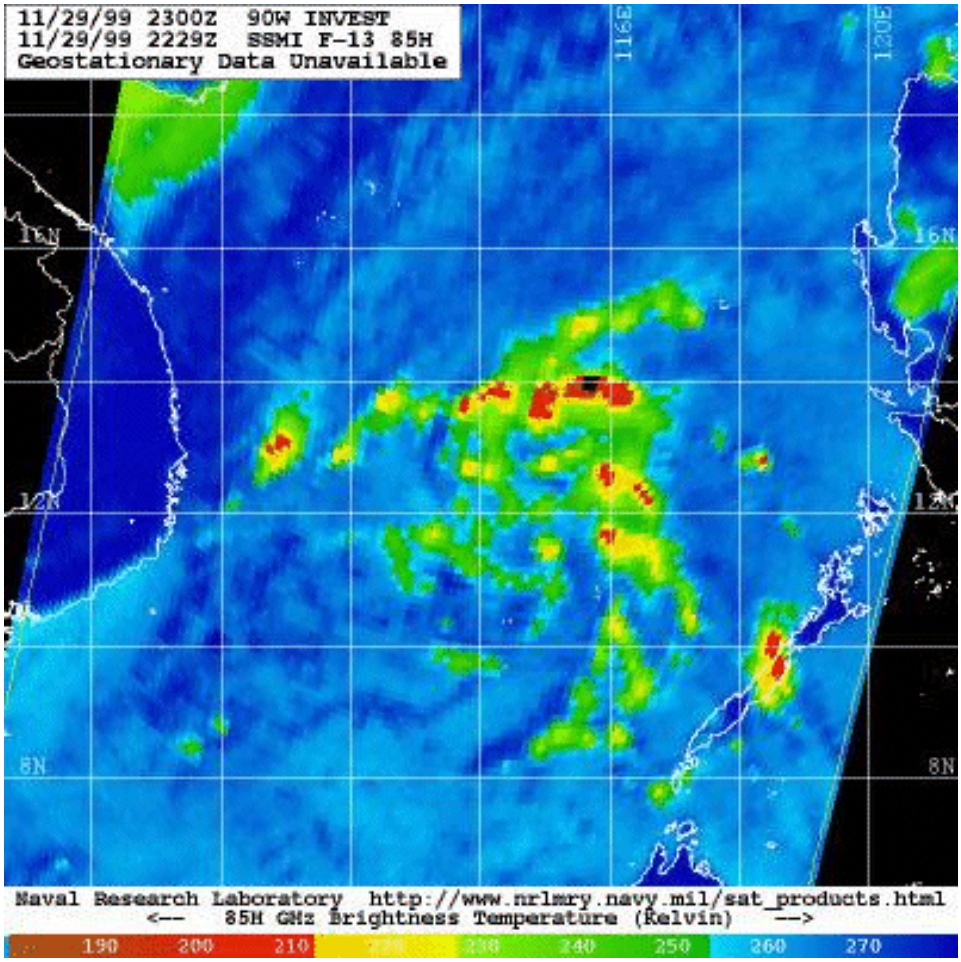


Figure 1-31-1. A Special Sensor Microwave Imager (SSM/I) image, taken at 292229Z November. A Tropical Cyclone Formation Alert was issued for this disturbance that would become Tropical Depression 31W. This image shows the increased organization and weak low-level circulation.

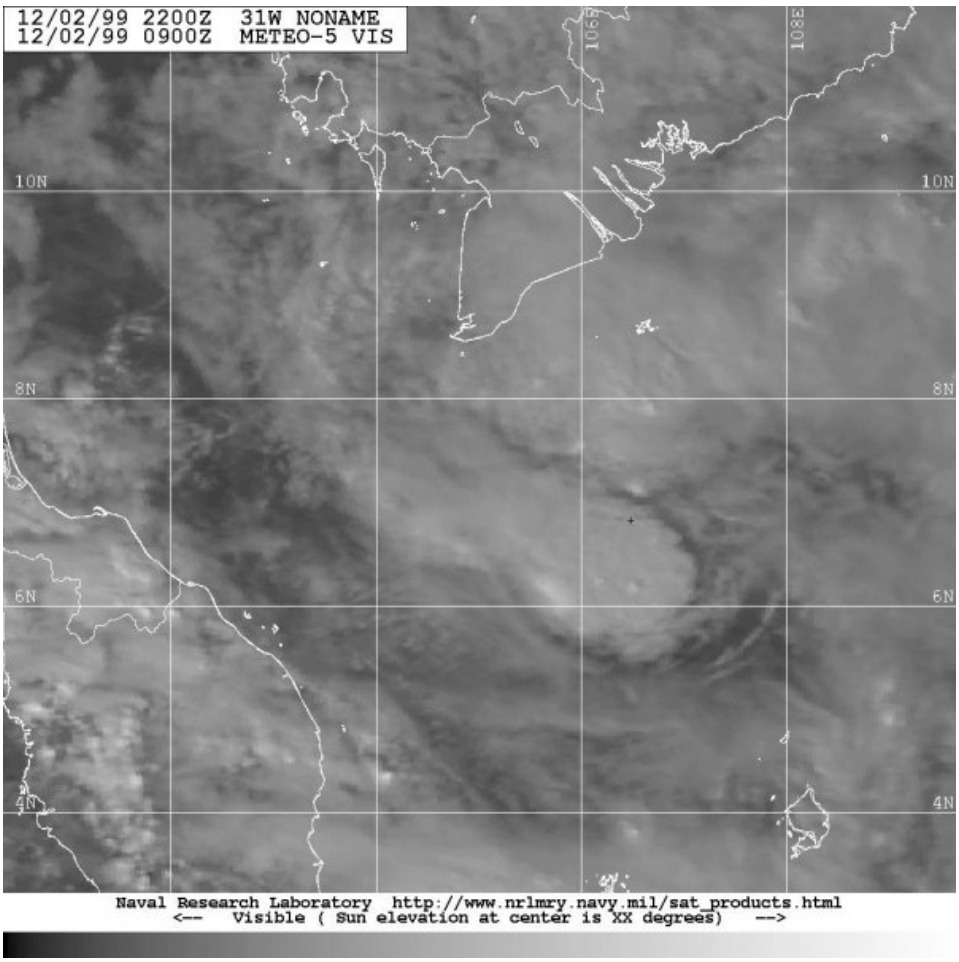
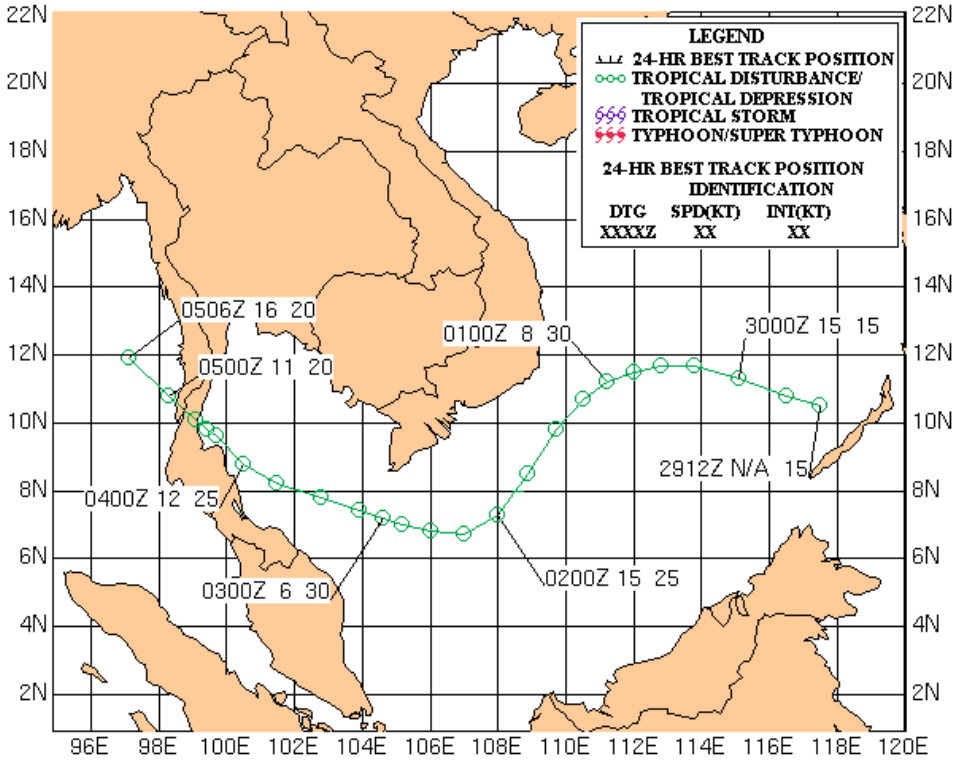


Figure 1-31-2. This visible Meteosat-5 image was taken at 020900Z December, shortly after Tropical Depression 31W was relocated 200 nm southwest. The weak low-level circulation is difficult to locate (near 6.8N 106.5E) and the moderate vertical wind shear environment is evident in the satellite imagery.


LEGEND
24-HR BEST TRACK POSITION
TROPICAL DISTURBANCE/
TROPICAL DEPRESSION
TROPICAL STORM
TYPHOON/SUPER TYPHOON
24-HR BEST TRACK POSITION
IDENTIFICATION
DTG SPD(KT) INT(KT)
XXXXZ XX XX
0506Z 16 20
0500Z 11 20
0100Z 8 30
3000Z 15 15
2912Z N/A 15
0400Z 12 25
0300Z 6 30
0200Z 15 25
22N
20N
18N
16N
14N
12N
10N
8N
6N
4N
2N
96E
98E
100E
102E
104E
106E
108E
110E
112E
114E
116E
118E
120E